BASIC WCA ADMINISTRATION REPLACEMENT EXAMPLE

BWSR Academy

October 27, 2010

Replacement Plan

- Do and Don’ts
- Complete Applications
- Ecological Suitability
- Conditional Approvals

Landowner not eligible for Exemption

- Do explain the replacement options, including ratios, sitting and especially sequencing
- Don't indicate that an application will automatically approved
- Do encourage hiring a consultant
- Don't recommend a specific consultant (give them list to pick from)
- Do consider known special considerations
- Don't complete the application for the LO
- Do encourage a pre-app TEP
- Make sure they know they can't impact until replacement has started (or later)

Replacement Plans

- You get a plan in the mail, now what?
- What do you do first?
  - A. Call my BWSR person and ask him/her what to do
  - B. Deny it, because you never liked the guy
  - C. Notice receipt of the application
  - D. Determine if the application is complete

  You have 15 business to determine if you have a complete application

  You also have 15 business days to notice

  Coincidence?????

Minnesota Wetland Conservation Act
Replacement Plan: Complete Application Checklist

Local Government Unit (LGU)		Address	
Applicant Name	Project Name	Date of Application	Application Number

Check yes or no or leave blank if not applicable:

GENERAL APPLICATION REQUIREMENTS

Item #	Yes	No	
1)	☐	☐	Minnesota Local/State/Federal Application Form for Water/Wetland Projects.
2)	☐	☐	The full name, post office address, and telephone number of applicant.
3)	☐	☐	For corporations, the principal officers of the corporation, any parent companies, owners, partners, and joint venturers, and a designated contact person.
4)	☐	☐	Managing agents, subsidiaries, or consultants that are or may be involved with the activity.
5)	☐	☐	The location of project by township, range, section, and quarter section.
6)	☐	☐	Evidence of ownership of the project area or the requisite property rights to perform the activity.
7)	☐	☐	An accurate map, survey, or recent aerial photograph showing the boundaries of the project area and boundaries, size, and type of each wetland relevant to the activity.
8)	☐	☐	A written description of the proposed project and project area, including its areal extent, with sufficient detail to allow assessment of the amount and types of wetland to be affected.

FOR THE IMPACTED WETLAND

Item #	Yes	No	
9)	☐	☐	Square feet or acres of wetland proposed to be impacted by type (Circular 39 and Eggers & Reed).
10)	☐	☐	The minor watershed, major watershed, county, and bank service area.
11)	☐	☐	A soil survey map of the site showing soil type and identifying hydric soils (where available).
12)	☐	☐	A map showing locations of any surface inlets or outlets, natural or otherwise, draining into or out of the wetland and, if the wetland is within the shoreland wetland protection zone or floodplain, the distance and direction to the nearest watercourse.
13)	☐	☐	Information concerning the special considerations criteria in MN Rule 8420.0515 (if known or readily available).
14)	☐	☐	A list of all other known local, state, and federal permits and approvals required for the activity.

Sequencing Analysis:

15)	☐	☐	Project purpose and relevant requirements identified, and detailed project description included.
16)	☐	☐	Detailed description of project alternatives considered, including:
17)	☐	☐	At least 2 project alternatives that avoid wetland impacts described and/or shown (only 1 required for projects that repair or rehabilitate existing infrastructure)
18)	☐	☐	Wetland impact minimization efforts identified
19)	☐	☐	Description of proposed rectification activities for any temporary wetland impacts (if applicable)
20)	☐	☐	Description of BMPs planned to protect wetland functions after project completion (if applicable)
21)	☐	☐	Information on the applicability of sequencing flexibility (if applicable as determined by the LGU)

FOR THE REPLACEMENT WETLAND WHEN REPLACEMENT IS PROJECT-SPECIFIC

	Yes	No	
22)	☐	☐	The proposed action(s) eligible for credit from MN Rule 8420.0526 is identified.
23)	☐	☐	The minor watershed, major watershed, county, and bank service area of the proposed wetland replacement area(s).
24)	☐	☐	Evidence of ownership or property rights to the replacement area(s).
25)	☐	☐	Information concerning the special considerations criteria in MN Rule 8420.0515 (if known or readily
1)			in MN Rule 8420.0515 (if known or readily available).
2)	☐	☐	A description of how the proposed replacement meets the ecological suitability and sustainability criteria under MN Rule 8420.0522, subpart 5.
3)	☐	☐	A map showing locations of any surface inlets or outlets, natural or otherwise, draining into or out of the replacement wetland(s) and, if the replacement wetland is within the shoreland wetland protection zone or floodplain, the distance and direction to the nearest watercourse.
4)	☐	☐	Scale drawings showing plan and profile views of the replacement wetland area(s).
5)	☐	☐	A description of how the replacement area will be constructed; the type, size and specifications of any outlet structures; elevations, relative to mean sea level, of key features; and best management practices that will be implemented to prevent erosion or site degradation.
6)	☐	☐	A soil survey map of the site showing soil type and identifying hydric soils (where available) and site-specific soils information sufficient to determine the capability of the site to produce and sustain wetland characteristics and achieve replacement goals.
7)	☐	☐	A timetable that clearly states how and when implementation of the replacement plan will proceed and when construction of the replacement area will be completed.
8)	☐	☐	Signed statements by the applicant in accordance with MN Rule 8420.0330, Subpart 3, Item B(11).
9)	☐	☐	Evidence that a person proposing to create or restore a wetland within the easement of a pipeline has first notified the easement holder and the director of the Office of Pipeline Safety in writing.
10)	☐	☐	A list of all other known local, state, and federal permits and approvals required for the replacement activity.
11)	☐	☐	Evidence that any drainage or property rights potentially detrimental to the replacement area have been acquired, subordinated, or otherwise eliminated.
12)	☐	☐	A vegetation establishment and management plan according to MN Rule 8420.0528, Subp. 2, Item D.
13)	☐	☐	The size, type, and credits expected to result from the proposed replacement actions.

FOR REPLACEMENT BY WETLAND BANKING

	Yes	No	
14)	☐	☐	The account number(s) of the wetland bank where credits are proposed to be withdrawn.
15)	☐	☐	The minor watershed, major watershed, county, and bank service area of the bank site.
16)	☐	☐	The amount of replacement credits to be withdrawn in square feet.
17)	☐	☐	A completed application for withdrawal of replacement credits from the wetland bank(s) or a purchase agreement signed by the applicant and bank account holder.

For all replacement plans:

18)	☐	☐	A summary description of the required replacement as determined according to the proposed impacts and replacement actions and the replacement standards in MN Rule 8420.0522.

Note: If any of the above items are checked "No," the application is incomplete. For incomplete applications, the LGU must notify the applicant within 15 business days of receipt of the application and list in writing what items or information is missing. If notification is not provided within 15 business days, the LGU must make a decision on the application or work with the applicant to voluntarily withdraw or revise it.

The application is: ☐ Complete ☐ Incomplete

For incomplete applications, describe the information needed to make the application complete:

Example Replacement

- An application came in, with no pre-application
- Delineation preceded the application by 30 days (Wasn't noticed)
- No formal delineation decision was made prior to receipt of application
- Boundaries were different on the two applications

What to do about the 2 Delineations

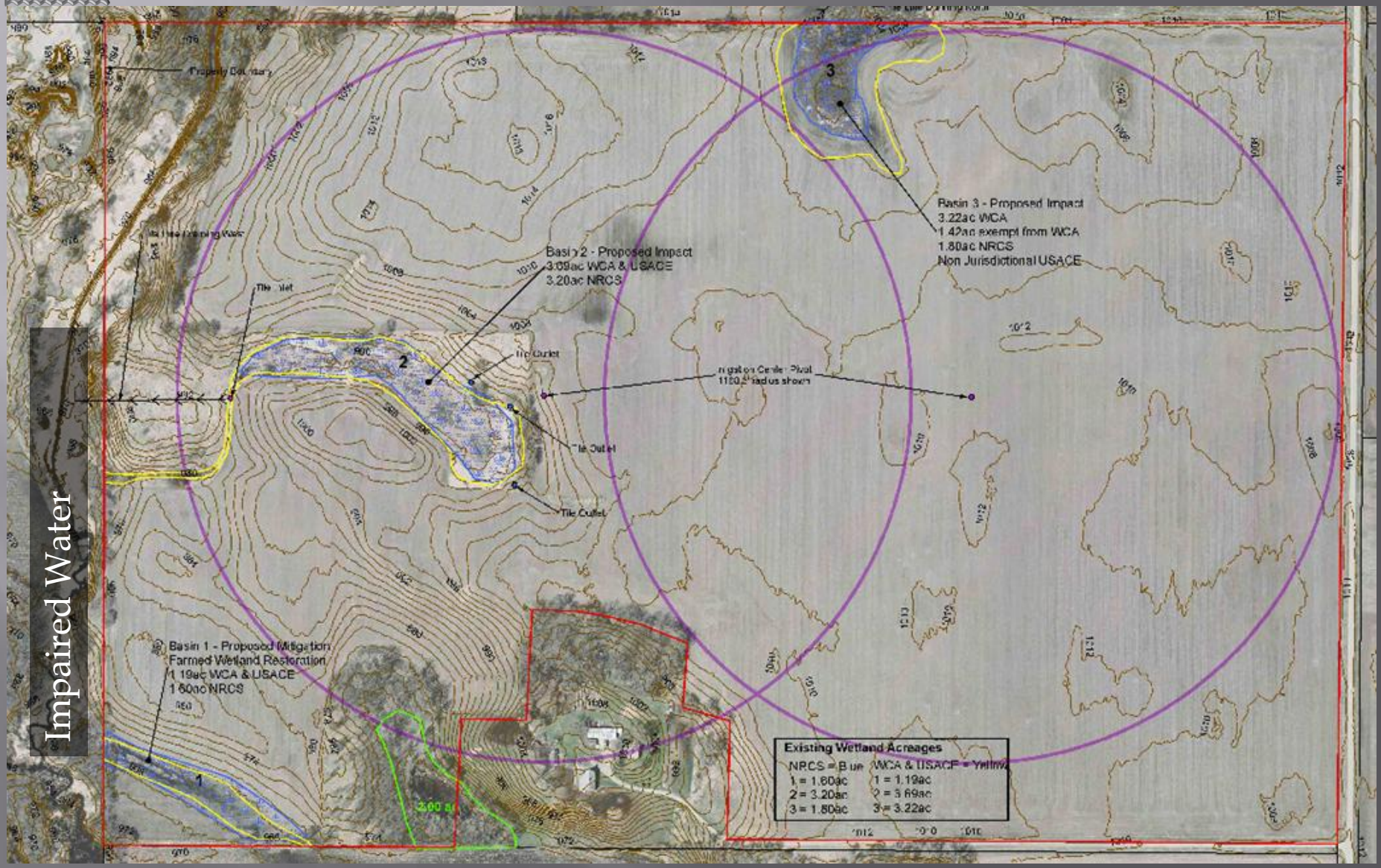
- What do you do?
  - A. Nothing, just ignore the 1st delineation, it's not important
  - B. Deny the 1st delineation and note that you'll consider the boundaries in the 2nd.
  - C. Ask the consultant, to clarify which application they want a decision on and withdraw the one they don't

Answer: Absolutely not A!!!!!!

Notice Delineation

- Delineations are a component of replacement plans
- The boundaries and types have direct bearing on replacement (function and values)
- In this example the consultant asked for default approval of the smaller number of acres
- What do you do???

Wetland Delineation



Multiple Agency Jurisdiction

Table 3. WCA Wetland Impact Summary

Wetland Basin	Delineated Area (Acres)	Impact	Replacement Ratio	Replacement Credit Needed (Acres)
2	3.69	Drain & Fill Wetland	1:1	3.69
3*	1.80	Drain & Fill Wetland	1:1	1.80
4**	1.02	Remove Vegetation	1:1	1.02
Mitigation Basin	0.48	Construct Dike	1:1	0.48
Total	6.99			**6.99**

Table 5. NRCS Wetland Impact Summary

Wetland Basin	Delineated Area (Acres)	Impact	Replacement Ratio	Replacement Credit Needed (Acres)
2	3.20	Drain & Fill Wetland	1:1	3.20
3	1.80	Drain & Fill Wetland	1:1	1.80
4*	1.02	Remove Vegetation	1:1	1.02
Mitigation Basin	0.48	Construct Dike	1:1	0.48
Total	6.50			**6.50**

* 1.02 acres of impact to the 2.60 acre wetland on the applicant's property.

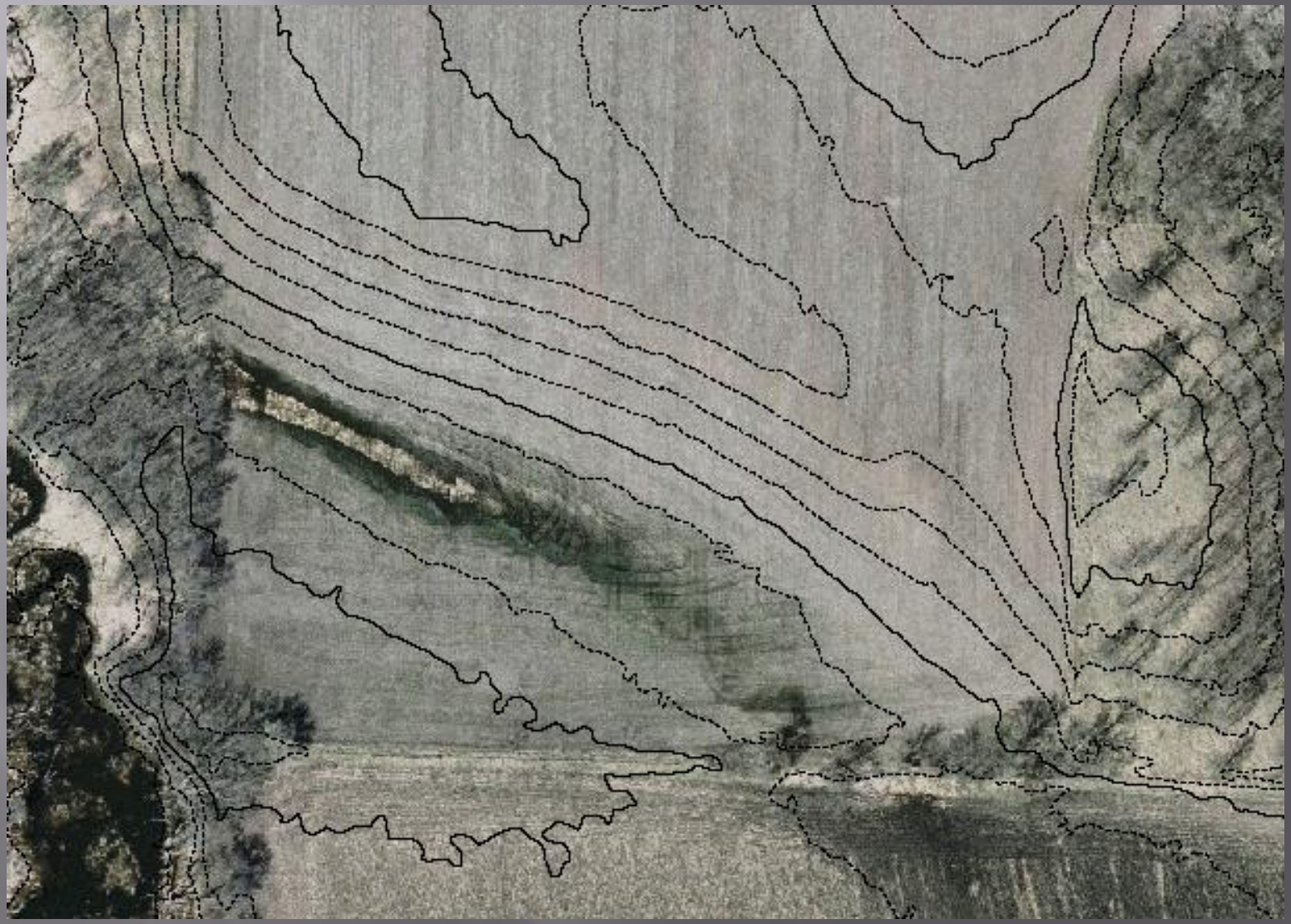
Table 7. USACE Wetland Impact Summary

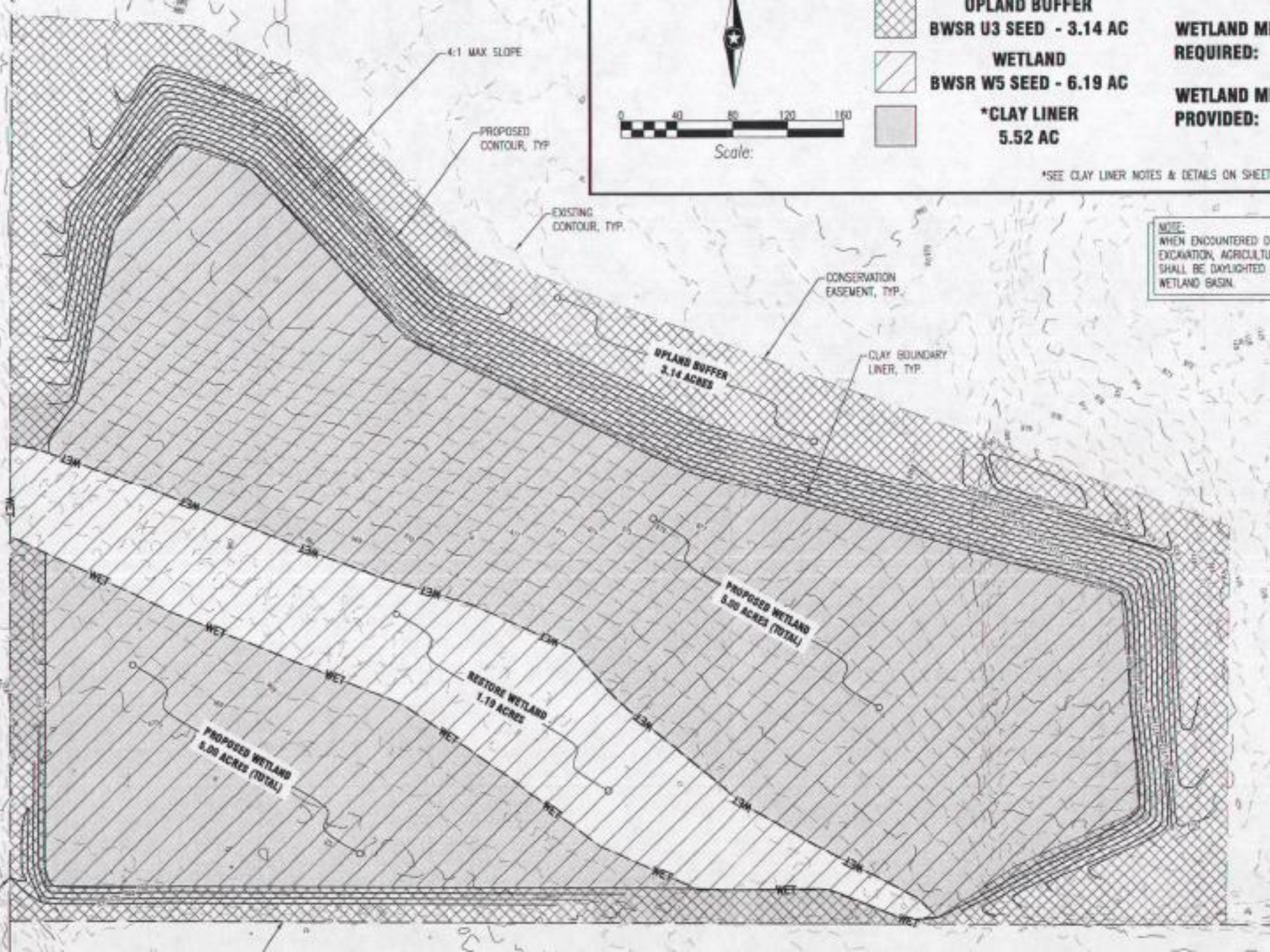
Wetland Basin	Delineated Area (Acres)	Impact	Replacement Ratio	Replacement Credit Needed (Acres)
2	3.69	Drain & Fill Wetland	2:1	7.38
4*	1.02	Remove Vegetation	2:1	2.04
Mitigation Basin	0.48	Construct Dike	2:1	0.96
Total	5.19			**10.38**

* 1.02 acres of impact to the 2.60 acre wetland on the applicant's property.


Basin 3 - Proposed Impact
3.22ac WCA
1.42ac exempt from WCA
1.80ac NRCS
Non Jurisdictional USACE
Basin 2 - Proposed Impact
3.09ac WCA & USACE
3.20ac NRCS
Tile Outlet
Tile Outlet
Tile Outlet
Proposed Mitigation
2.95ac Upland Buffer
Proposed Mitigation
Wetland Creation
2.29ac WCA & USACE
1.85ac NRCS
Basin 1 - Proposed Mitigation
Farmed Wetland Restoral on
.19ac WCA & USACE
.60ac NRCS
Existing Wetland Acreages
NRCS = Blue
1 = 1.60ac
2 = 3.20ac
3 = 1.80ac
WCA & USACE = Yellow
1 = 1.19ac
2 = 3.69ac
3 = 3.22ac

Replacement Site




UPLAND BUFFER
BWSR U3 SEED - 3.14 AC
WETLAND
BWSR W5 SEED - 6.19 AC
*CLAY LINER
5.52 AC
WETLAND M
REQUIRED:
WETLAND M
PROVIDED:
*SEE CLAY LINER NOTES & DETAILS ON SHEET
0 40 80 120 160
Scale:
4:1 MAX SLOPE
PROPOSED CONTOUR, TYP
EXISTING CONTOUR, TYP
CONSERVATION EASEMENT, TYP.
CLAY BOUNDARY LINER, TYP.
UPLAND BUFFER 3.14 ACRES
PROPOSED WETLAND 5.00 ACRES (TOTAL)
RESTORE WETLAND 1.19 ACRES
PROPOSED WETLAND 5.00 ACRES (TOTAL)
WET
NOTE:
WHEN ENCOUNTERED D
EXCAVATION, AGRICULTU
SHALL BE DAYLIGHTED
WETLAND BASIN.

FOR THE REPLACEMENT WETLAND WHEN REPLACEMENT IS PROJECT-SPECIFIC

	Yes	No	
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27)	☐	☐	A map showing locations of any surface inlets or outlets, natural or otherwise, draining into or out of the replacement wetland(s) and, if the replacement wetland is within the shoreland wetland protection zone or floodplain, the distance and direction to the nearest watercourse.
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30)	☐	☐	A soil survey map of the site showing soil type and identifying hydric soils (where available) and site-specific soils information sufficient to determine the capability of the site to produce and sustain wetland characteristics and achieve replacement goals.
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36)	☐	☐	A vegetation establishment and management plan according to MN Rule 8420.0528, Subp. 2, Item D.
37)	☐	☐	The size, type, and credits expected to result from the proposed replacement actions.

Subp. 5. Ecological suitability and sustainability.

A. The preferred method of replacement is that which takes advantage of naturally occurring hydrogeomorphic conditions with minimal landscape alteration and is most likely to result in a wetland area that functions wholly, perpetually, and naturally. Wetland restoration is generally preferred over creation, and restoration of completely impacted wetlands is generally preferred over other methods of replacement.

B. Restoration and replacement of wetlands must be accomplished according to the ecology of the landscape area. The replacement site must be ecologically suitable for providing the desired functions and compatible with adjacent land uses. A replacement or banking plan that would result in wetland types or characteristics that do not naturally occur in the landscape area in which the replacement will occur must be denied. Replacement must not adversely affect other habitat types or ecological communities that are important in maintaining the overall biological diversity of the area.

C. Replacement projects must be located and designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. "Self-sustaining" refers to the ability of a wetland to provide the desired functions over time in a changing landscape without human intervention.

D. In addition to items A to C, when determining the location, type, function, and design of replacement, applicants and local government units must consider: landscape position, habitat requirements, development and habitat loss trends, sources of watershed impairment, protection and maintenance of upland resources and riparian areas, and providing a suite of functions.

8420.0528 REPLACEMENT WETLAND CONSTRUCTION STANDARDS.

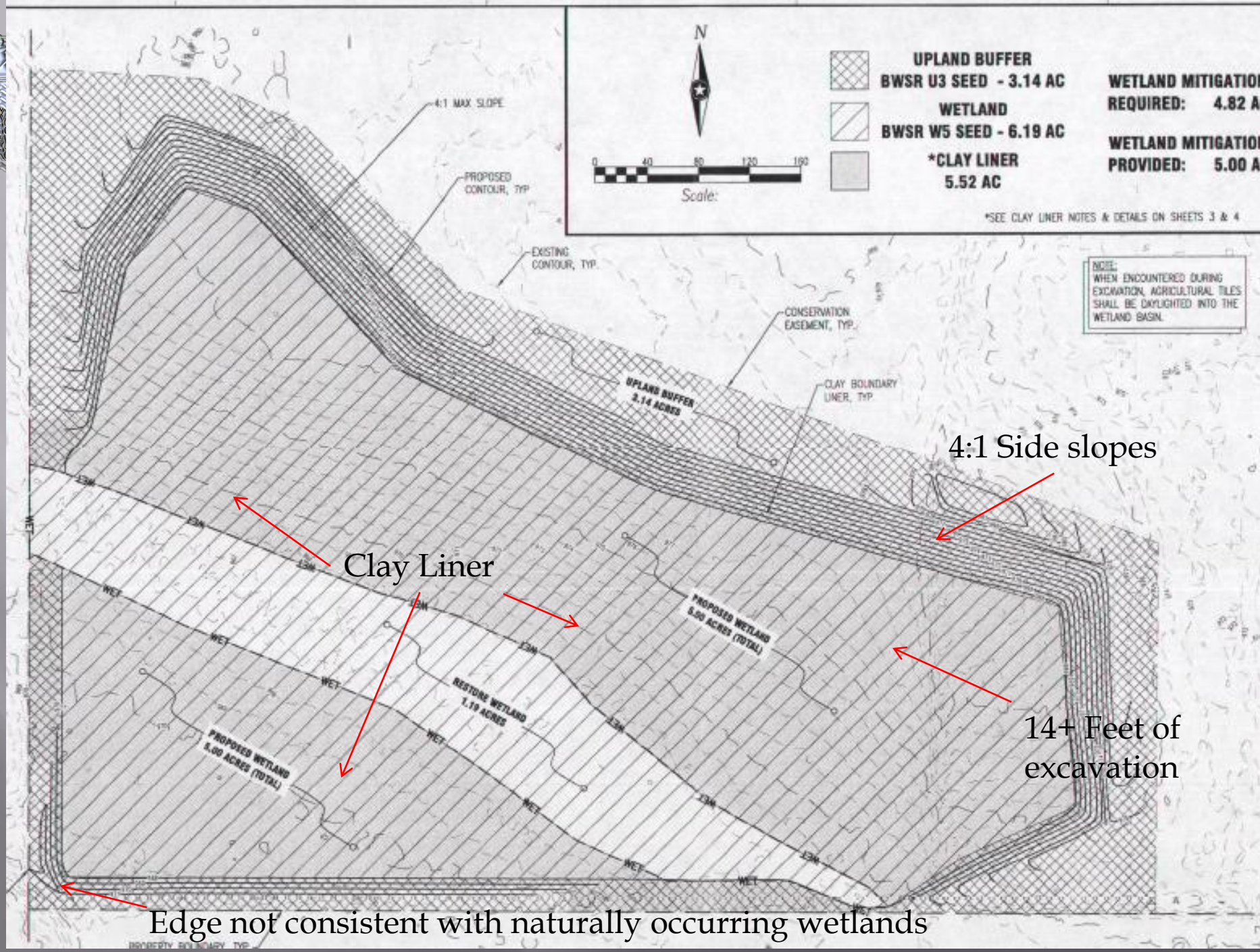
Subp. 2.Design requirements.

- **F.** The edge of created or graded wetlands must be comparable to other naturally occurring wetlands of similar hydrologic condition and landscape position in the major watershed. Sideslopes of created wetlands, graded portions of restored wetlands, and graded buffer strips, must not be steeper than 8:1, eight feet horizontally for every one foot vertically, or flatter, unless the technical evaluation panel concurs that steeper slopes are acceptable based on the surrounding landscape and the characteristics of other naturally occurring wetlands in the vicinity. Sideslopes of 10:1 to 15:1 are preferred.

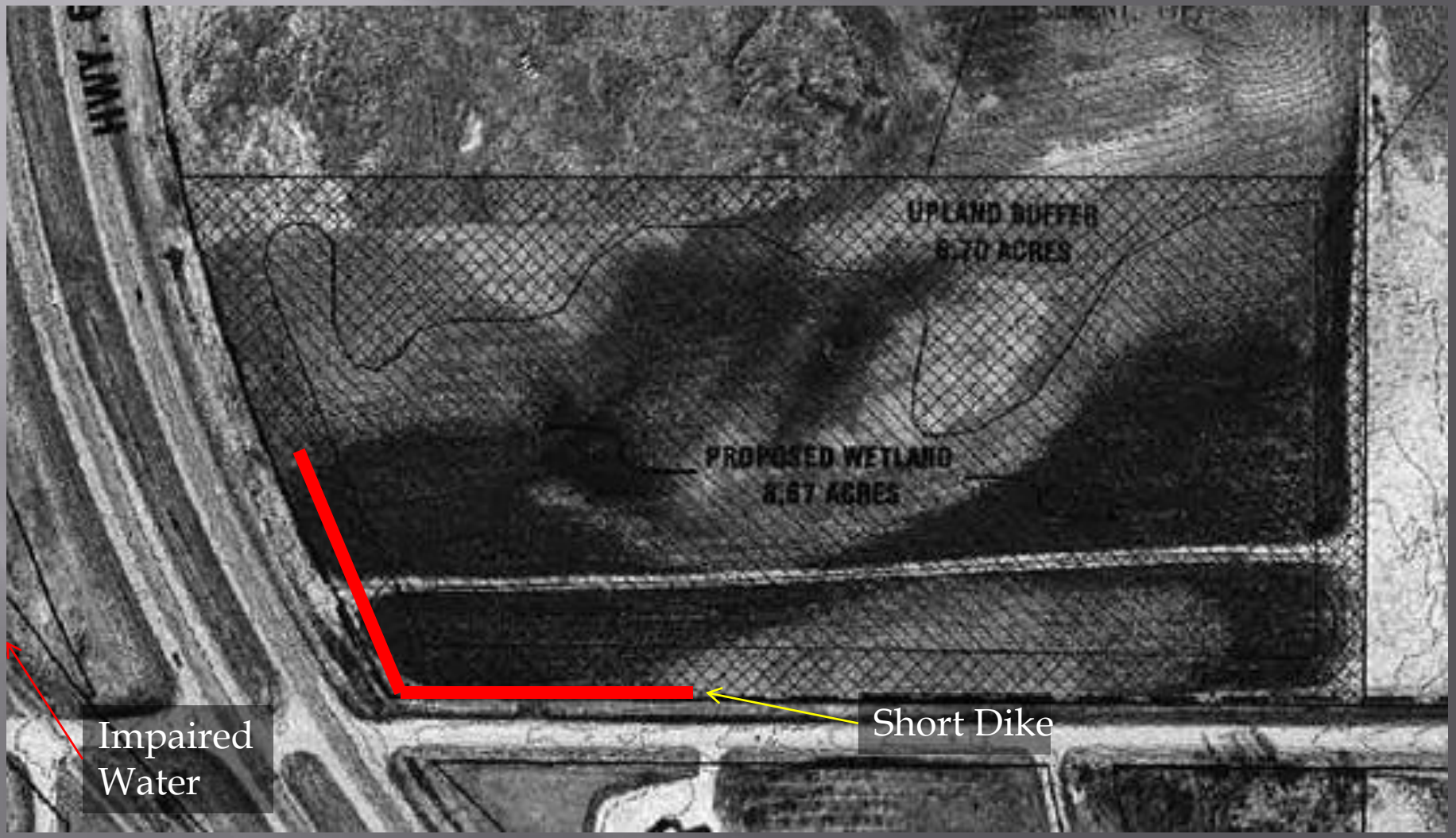
8420.0528 REPLACEMENT WETLAND CONSTRUCTION STANDARDS.

Subp. 3. Design considerations.

D. for all restored wetlands where the original organic substrate has been stripped away and for all created wetlands, the organic substrate must be sufficient to establish a functioning wetland and to accomplish the goals of the replacement or banking plan. When feasible, organic soil used for backfill should be salvaged from the impacted wetland for utilization in the replacement wetland. Organic soil for backfill from wetlands dominated by nonnative or invasive species should be avoided.


N
0 40 80 120 160
Scale:
UPLAND BUFFER
BWSR U3 SEED - 3.14 AC
WETLAND
BWSR W5 SEED - 6.19 AC
*CLAY LINER
5.52 AC
WETLAND MITIGATION
REQUIRED: 4.82 A
WETLAND MITIGATION
PROVIDED: 5.00 A
*SEE CLAY LINER NOTES & DETAILS ON SHEETS 3 & 4
NOTE:
WHEN ENCOUNTERED DURING EXCAVATION, AGRICULTURAL TILES SHALL BE DAYLIGHTED INTO THE WETLAND BASIN.
4:1 MAX SLOPE
PROPOSED CONTOUR, TYP
EXISTING CONTOUR, TYP
CONSERVATION EASEMENT, TYP
CLAY BOUNDARY LINER, TYP
UPLAND BUFFER 3.14 ACRES
PROPOSED WETLAND 5.00 ACRES (TOTAL)
RESTORE WETLAND 1.19 ACRES
PROPOSED WETLAND 5.00 ACRES (TOTAL)
WET
12M
PROPERTY BOUNDARY, TYP
4:1 Side slopes
Clay Liner
14+ Feet of excavation
Edge not consistent with naturally occurring wetlands

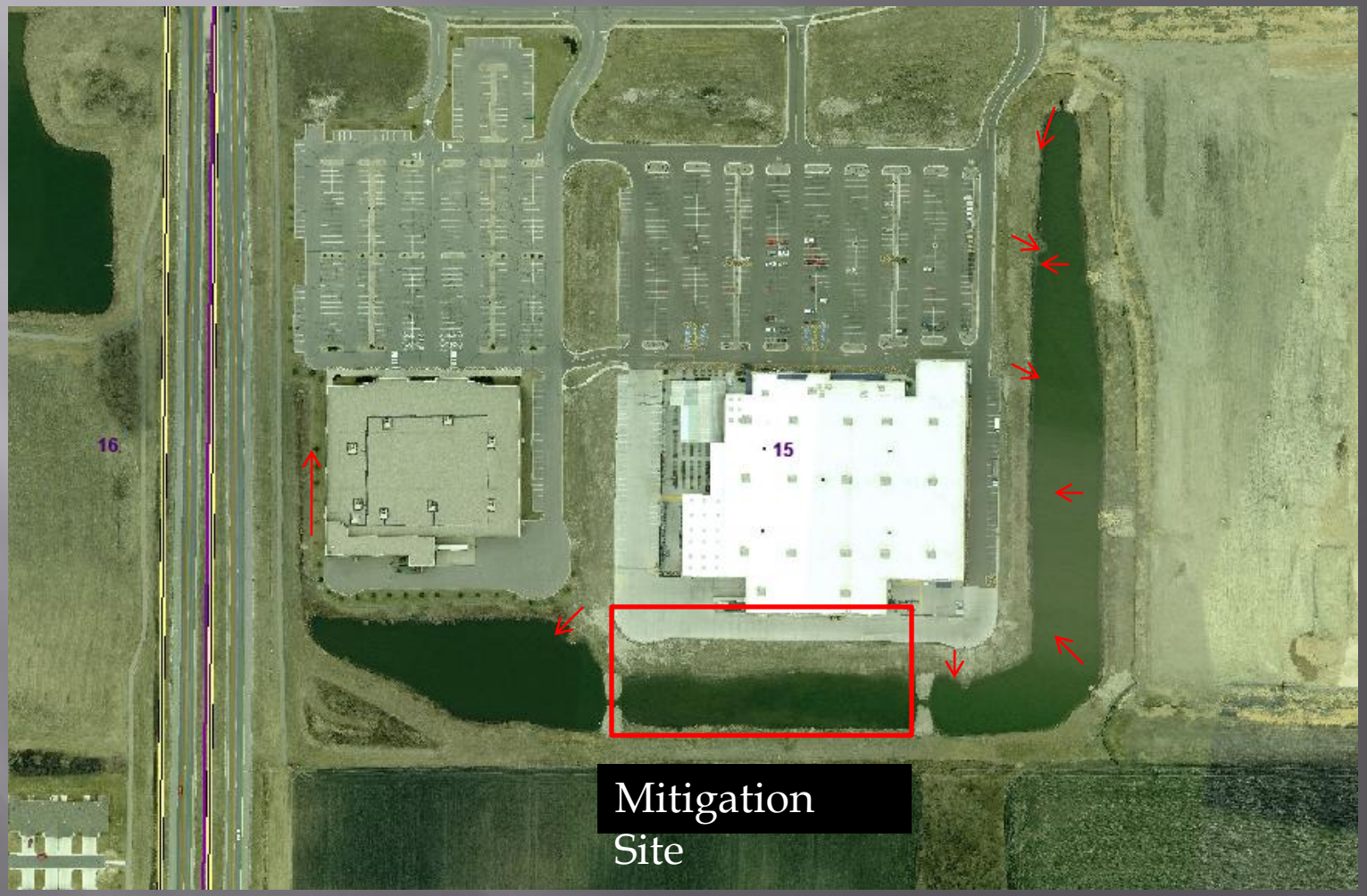
New Replacement Site



Desription of Ecological Suitability

The applicant is taking advantage of a partially drained wetland basin to complete the mitigation required for his impacts by restoring a previously impacted area. Based on the county soils map the planned restoration will restore the natural hydrogeomorphic condition. It will require a tile break and a small dike (to protect the state highway) in order to restore the hydrology. Due to the cropping history there should be less risk of encroachment of invasive plant species. The replacement wetland is directly adjacent to an existing wetland area and will provide increased wildlife habitat and corridor.

Ecological Suitability Example



Ecological Suitability Example

Conditional Approvals

An Example of what not to do

Example 1

Anycounty County received a
Summary table and Mitigatio
supporting documentation or
indicate reflect receiving 90 %
wetland currently on-site rath
the original application. The A
review these new tables, how
required to mitigate for 6.99 acres of WCA wetland impact so the percent credit for these existing wetland acres may not be that important for the purpose of satisfying the WCA requirements.

Why? And what will you do if you don't like what you see?

The County would like to see a map showing the existing planned wetland area (size in acres) inside of the overall proposed wetland replacement plan.

Example 2

Anycounty County has reviewed the MNRAM analysis for each of the existing wetland basins and is not in agreement with the wetland community summary of any of them. The MNRAM analysis indicates that basins 1, 2, & 3 are Type 1 (Seasonally Flooded Basins), however, the wetland summary tables on page 3 of the application indicate different wetland types (Basin 3 -Type 2 / 3 & Basin 2 - Type 3). Anycounty County also does not agree with the overall MNRAM ranking of basin 2 as moderate. The wetland vegetation diversity of this basin is high, not moderate, and much of the other characterization of this basin is also not accurate. This wetland basin is one of the nicest sedge dominated wetlands that we have reviewed for WCA projects in our County and we want to make sure that the replacement of lost wetland functions and values is satisfied with the replacement wetland as per Minnesota Rules, Chapter 8420.0528. If the final MNRAM analysis of the replacement wetland does not show at least 3.69 acres of wetland with a high rating the replacement plan may be considered inadequate and additional requirements may be necessary.

Has the right idea, but it very difficult to go back after

If the MnRAM (or any other part of the application) is faulty reject it and make the applicant correct or amend the application.

deny or get more info.

Example 3

Waiting for additional review

The core trench information received on May 27th must be reviewed by the SWCD for adequacy. Any additional comments / requirements on the core trench and dike construction will be forwarded to AnyConsultantGroup as soon as we receive the SWCD comments.

The wetland outlet & dike for this project must be reviewed by the BWSR engineer & MNDOT engineer for final approval. We have concerns over a project of this size, the size of the watershed, dike height, and the pool elevation / spillway elevation / size of the class 3 riprap. The drainage diagram for the Hydro Check does not show what area was used for this analysis. Does the HydroCAD hydrology report account for the watershed coming from the west side of CR #115? If not, this additional information should be submitted and included in the review materials for BWSR & MNDOT.

They should also know the size of the existing culvert under CR # 115 and the outlet culvert under Trunk Highway # 60. If either of their reviews suggest installation of a control structure and using the spillway as an emergency overflow structure as we suggested in our May 11th TEP meeting than that will placed as one of the conditions of approval. If these additional engineering reviews have no additional concerns with the proposed construction of the dike and spillway they can remain the as currently submitted.

Engineering is very complex, additional concerns might change the entire scope of the project. If additional review is needed extend the timeline or deny

Conditional Approvals

Anycounty County received a revised WCA Impact Summary table and Mitigation Summary table with some supporting documentation on May 27th. These new tables indicate reflect receiving 90 % credit for the existing farmed wetland currently on-site rather than the 50 % credit from the original application. The Anycounty County TEP will review these new tables, however, the applicant is only required to mitigate for 6.99 acres of WCA wetland impact so the percent credit for these existing wetland acres may not be that important for the purpose of satisfying the WCA requirements.

The County would like to see a map showing the existing fanned wetland area (size in acres) inside of the overall proposed wetland replacement plan.

The core trench information received on May 27th must be reviewed by the SWCD for adequacy. Any additional comments / requirements on the core trench and dike construction will be forwarded to I & S Group as soon as we receive the SWCD comments.

Anycounty County has reviewed the MNRAM analysis for each of the existing wetland basins and is not in agreement with the wetland community summary of any of them. The MNRAM analysis indicates that basins I, 2, & 3 are Type 1 (Seasonally Flooded Basins), however, the wetland summary tables on page 3 of the application indicate different wetland types (Basin 3 -Type 2 / 3 & Basin 2 - Type 3). Anycounty County also does not agree with the overall MNRAM ranking of basin 2 as moderate. The wetland vegetation diversity of this basin is high, not moderate, and much of the other characterization of this basin is also not accurate. This wetland basin is one of the nicest sedge dominated wetlands that we have reviewed for WCA projects in our County and we want to make sure that the replacement of lost wetland functions and values is satisfied with the replacement wetland as per Minnesota Rules, Chapter 8420.0528. If the final MNRAM analysis of the replacement wetland does not show at least 3.69 acres of wetland with a high rating the replacement plan may be considered inadequate and additional requirements may be necessary.

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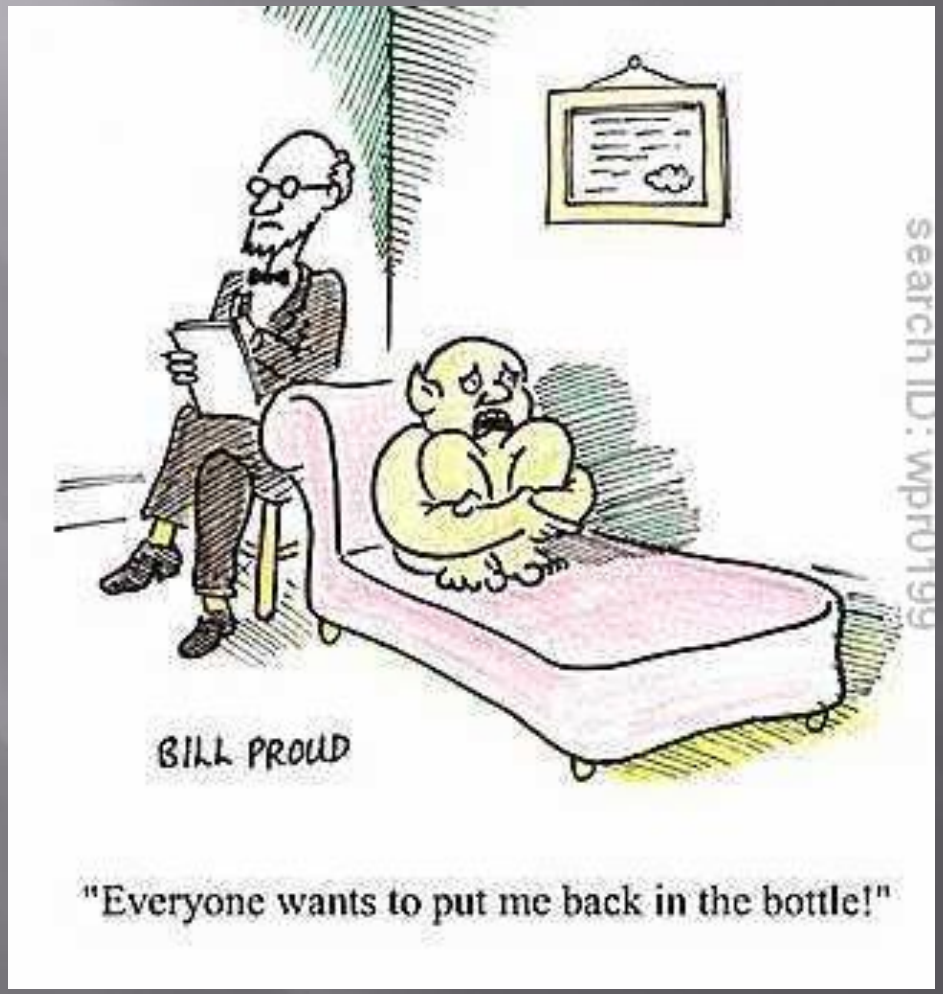
Conditional Approvals



Conditional Approvals Summary

- Use cautiously!
- Keep it simple!
- Don't use it in lieu of denials, just to get it off your desk.
- If application doesn't pass muster on it's own, deny it!
- All replacement plans have conditional approvals

Notice of Decision Form

Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

☐ **Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).

☐ **Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR "Declaration of Restrictions and Covenants" and "Consent to Replacement Wetland" forms have been filed with the county recorder's office in which the replacement wetland is located.

☐ **Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met!